From: Flowers, Lynn [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1A4411C874D041B9A8BADFC32B91BD70-FLOWERS, LYNN]

Sent: 5/18/2016 1:08:00 PM

To: Cogliano, Vincent [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=51f2736376ac4d32bad2fe7cfef2886b-Cogliano, Vincent]; Bussard, David

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=cf26b876393e44f38bdd06db02dbbfe5-Bussard, David]; Birchfield, Norman

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=c910f2fd28414e819b6afe6dda525e9f-Birchfield, Norman]; Berner, Ted

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=f1949c9653024d3cb4aa4c2bd69c4fde-Berner, Ted]; Bateson, Thomas

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=29bfdde020bf4e93b431b9a72d9d230f-Bateson, Thomas]

CC: Fegley, Robert [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=790aa5a70d9045bda631d9d6e548d704-Fegley, Robert]; McQueen,

Jacqueline [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=3a023f4d48ee4e1f8b758fa87310f703-McQueen, Jackie]

Subject: FW: UN Agencies: Glyphosate 'Unlikely' to Cause Cancer (BNA Report)

Sharing more widely....

From: Deener, Kathleen

Sent: Wednesday, May 18, 2016 8:51 AM

To: Burke, Thomas <Burke.Thomas@epa.gov>; Kavlock, Robert <Kavlock.Robert@epa.gov>; Hauchman, Fred <hauchman.fred@epa.gov>; Bahadori, Tina <Bahadori.Tina@epa.gov>; Cogliano, Vincent <cogliano.vincent@epa.gov>; Gwinn, Maureen <gwinn.maureen@epa.gov>; Corona, Elizabeth <Corona.Elizabeth@epa.gov>; Blackburn, Elizabeth <Blackburn.Elizabeth@epa.gov>; Vandenberg, John <Vandenberg.John@epa.gov>; Flowers, Lynn

<Flowers.Lynn@epa.gov>; Fegley, Robert <Fegley.Robert@epa.gov>

Subject: UN Agencies: Glyphosate 'Unlikely' to Cause Cancer (BNA Report)

UN Agencies: Glyphosate 'Unlikely' to Cause Cancer

By Bryce Baschuk

May 16 — A pair of United Nations agencies said the widely used herbicide glyphosate and two insecticides—diazinon and malathion—are unlikely to pose carcinogenic risk to human beings when exposed to the body in dietary form.

The UN Food and Agriculture Organization (FAO) and the World Health Organization (WHO) issued their findings May 16 in a <u>joint report</u> following a weeklong meeting in Geneva.

The findings are noteworthy as they run counter to a 2015 report by WHO's International Agency for Research on Cancer (IARC) that classified glyphosate, diazinon and malathion as "probably carcinogenic to humans."

The FAO and WHO conclusions were based upon an analysis of a "large number" of genotoxicity studies conducted during the past five years that measured the chemicals' effects on living mammals—primarily mice and rats, but also humans.

The joint report noted that it evaluated several new studies that were not considered in the 2015 IARC report.

"In view of the absence of carcinogenic potential in rodents at human-relevant doses and the absence of genotoxicity by the oral route in mammals, and considering the epidemiological evidence from occupational exposures, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet," said the report.

Glyphosate

Though the joint report noted that there is "some evidence" of a positive association between glyphosate exposure and a risk for non-Hodgkin lymphoma, it said the only study of "high quality" found no evidence of an association at any exposure level.

Glyphosate—originally developed by Monsanto International SARL under the brand name Roundup—is the world's top herbicide by volume and is used in more than 750 products related to agriculture, forestry, urban and residential landscaping.

The report was released just days before the European Commission's committee that handles pesticides was scheduled to weigh in on re-licensing glyphosate in the 28-nation EU.

"We welcome this rigorous assessment of glyphosate by another program of the WHO, which is further evidence that this important herbicide does not cause cancer," said Phil Miller, Monsanto's vice president for global regulatory and government affairs. "IARC's classification was inappropriate and inconsistent with the science on glyphosate. Based on the overwhelming weight of evidence, the [FAO/WHO report] has reaffirmed the findings of regulatory agencies around the world that glyphosate is unlikely to pose a cancer risk."

Diazinon

The joint report found "no convincing evidence" of a positive association between non-Hodgkin lymphoma and diazinon—which is used in agriculture and in home pest control.

The FAO/WHO report said an isolated study found "weak evidence" of a positive association between leukemia and lung cancer to diazinon exposure.

A 2001 U.S. Agricultural Health Study (AHS) report previously linked diazinon exposure to an increased risk for leukemia.

Malathion

The joint report said there is "some very weak evidence" of a positive association between non-Hodgkin lymphoma and malathion—which generally is used in agriculture, for mosquito eradication, and in urban and residential landscaping.

The report noted that the only large cohort study of high quality found no evidence of such an association at any exposure level.

The FAO/WHO report noted that one study found a possible positive association between occupational exposure to malathion and risk of aggressive prostate cancer.

The U.S. Agricultural Health Study previously found an increased risk of lung cancer for humans exposed to malathion.

In a statement, CropLife International CEO Howard Minigh commended the report, which he said "confirms prior conclusions of regulators around the world."

"It is important to note that the International Agency for Research on Cancer is not a regulator, and uses a narrow set of data to assess potential for hazard; whereas, regulators assess the real risk of a product," he wrote.

To contact the reporter on this story: Bryce Baschuk in Geneva at correspondents@bna.com
To contact the editor responsible for this story: Greg Henderson at ghenderson@bna.com

Kacee Deener, MPH
Senior Science Advisor
Office of Research and Development
(ph) 202.564.1990 | (mobile) 202.510.1490
deener.kathleen@epa.gov